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~~a primary station including a radio having a receiver and a transmitter wherein:~~

~~(i) said transmitter transmits synchronization information including an assignment of n transmission fixed periodic time slots, where n is an integer greater than 1, and n reception fixed periodic time slots on a selected frequency;~~

~~(ii) said radio transceives n concurrent duplex telephonic communications on the selected frequency wherein:~~

~~(a) said transmitter transmits a signal carrying TX speech information of n duplex telephonic communications, each in one of the n transmission time slots on the selected frequency; and~~

~~(b) said receiver receives signals carrying said RX speech information of each of said n duplex telephonic communications, each in one of the n reception time slots on the selected frequency; and~~

~~associated with each one of said n concurrent duplex communications, a secondary station having:~~

~~(i) a radio receiver which receives the synchronization information from the primary station and identifies the assignment of time slots and which receives the TX speech information of that said one duplex telephonic communication in said respective transmission time slot on the selected frequency; and~~

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25 (ii) ~~a radio transmitter which transmits the signal carrying~~
corresponding RX speech information of that said one duplex telephonic communication in
~~said respective reception time slot on the selected frequency.~~

12. A telecommunication system according to claim 11 wherein:

at least one of said secondary stations is a dual station which includes:

5 (i) a receiver which receives the synchronization information from
said primary station, identifies the assignment of time slots on said selected frequency, and
receives TX speech information of two of said n duplex telephonic communications on said
selected frequency in two respective of said transmission time slots; and

(ii) a transmitter which transmits signals carrying corresponding RX
speech information of the two of said n duplex telephonic communications on the selected
frequency in two respective of said reception time slots.

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13. ~~A telecommunication system according to claim 11 for conducting two~~
concurrent duplex telephonic communications wherein said primary station radio transmits
~~an assignment of two transmission and two reception time slots.~~

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cont.

14. ~~A telecommunication system according to claim 11 wherein the primary station is one of a plurality of subscriber units which telecommunicate with a base station and wherein at least one of said secondary stations is positioned outside the operating range of said base station at a remote location whereat direct communication with said base station can not be made.~~

15. A telecommunication station for conducting a plurality of concurrent duplex communications which comprise transmitted (TX) and received (RX) information using wireless transmissions between the station and one or more secondary stations over one of a plurality of available frequencies, the station comprising:

5 a transmitter which:

(i) transmits synchronization information including the assignment of $2n$ fixed periodic time slots, where n is an integer greater than 1, on a selected frequency, n fixed periodic transmit time slots for transmission from said station and n fixed periodic reception time slots for reception by said station; and

10 (ii) transmits a signal carrying the TX information of n duplex communications on the selected frequency, each in one of said n assigned transmit slots; and

a receiver which receives signals carrying the RX information of said n duplex communications on the selected frequency, each in one of said n assigned reception slot.

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cont.

~~16. A telecommunication system comprising the telecommunication station of~~

claim 15 and at least one secondary station which includes:

(i) a secondary station receiver which receives the synchronization information from said telecommunication station, identifies the assignment of time slots on said selected frequency, and receives the TX information of m , where m is an integer greater than 1 and less than or equal to n , of said duplex telephonic communications on the selected frequency in m of said assigned transmit slots; and

(ii) a secondary station transmitter which transmits a signal carrying the corresponding RX information of the m duplex telephonic communications on the selected frequency in m of said assigned reception slots.

17. A telecommunication station according to claim 15 wherein the station is a subscriber unit which telecommunicates with a base station and also telecommunicates with at least one secondary station which is positioned outside the operating range of said base station at a remote location whereat direct communication with said base station can not be made.

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cont.

18. A telecommunication station according to claim 15 wherein said transmitter and receiver are embodied in a radio.

19. ~~A telecommunication station for conducting a plurality of concurrent duplex communications which comprise transmitted (TX) and received (RX) information using wireless transmissions between the station and one or more secondary stations over one of a plurality of available frequencies, the station comprising:~~

a transmitter which:

(i) transmits synchronization information including the assignment of fixed periodic time slots on a selected frequency, at least two fixed periodic transmit time slots for transmission from said station and at least two fixed periodic reception time slots for reception by said station; and

10 (ii) transmits a signal carrying the TX information of a first duplex communication on the selected frequency in a first assigned transmit slot and carrying the TX information of a second duplex communication on the selected frequency in a second assigned transmit slot; and

~~a receiver which:~~

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(i) receives a signal carrying the RX information of said first duplex

communication transmitted from a secondary station on the selected frequency in a first assigned reception slot; and

(ii) receives a signal carrying the RX information of said second

duplex communication transmitted from a secondary station on the selected frequency in a second assigned reception slot.

20. A telecommunication station according to claim 19 wherein the station is a subscriber unit which telecommunicates with a base station and also telecommunicates with at least one secondary station which is positioned outside the operating range of said base station at a remote location whereat direct communication with said base station can not be made.

21. A telecommunication station according to claim 19 wherein said transmitter and receiver are embodied in a radio.--